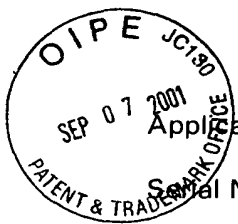


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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **Madison et al.**

Serial No.: **09/776,191**

Filed: **February 2, 2001**

For: **NUCLEIC ACID MOLECULES ENCODING  
TRANSMEMBRANE SERINE PROTEASES,  
THE ENCODED PROTEINS AND METHODS  
BASED THEREON**

Art Unit: **1614**

Examiner: **Unassigned**

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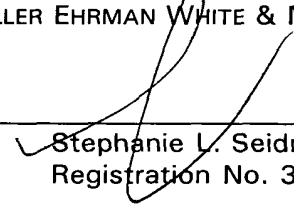
Commissioner for Patents  
Washington, D.C. 20231

Sir:

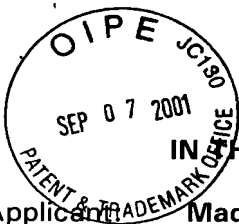
Transmitted herewith is an Information Disclosure Statement, Forms PTO-1449 (15 pages), and the cited references for filing in connection with the above-identified application. Because this Information Disclosure Statement is filed prior to receipt of a First Office Action on the merits in the above-referenced application, no fee is due. However, should it be determined that a fee for filing these papers is required, the Commissioner is authorized to charge Deposit Account No. 50-1213, as stated below:

( X )            The Commissioner is hereby authorized to charge any fees that may be due under 37 C.F.R. §§1.16-1.17 in connection with this paper or with this application during its entire pendency to Deposit Account No. 50-1213. A duplicate of this sheet is enclosed.

Respectfully submitted,  
HELLER EHRMAN WHITE & MCAULIFFE LLP

By:   
Stephanie L. Seidman  
Registration No. 33,779

**Dated: September 6, 2001**  
Attorney Docket No.: 24745-1607  
**Address all correspondence to:**  
Heller Ehrman White & McAuliffe LLP  
4350 La Jolla Village Drive, Suite 600  
San Diego, CA 92122-1246  
Telephone: 858/450-8403  
Facsimile: 858/587-5360  
EMAIL sseidman@HEWM.com



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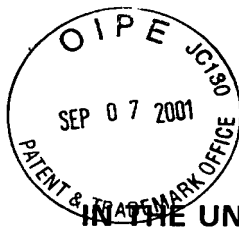
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**Serial No.: 09/776,191**

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**Art Unit: 1614**

**Examiner: Unassigned**

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT IN ACCORDANCE  
WITH 37 C.F.R. §§ 1.97-1.98**

Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Since this Supplemental Information Disclosure Statement is filed before the receipt of a first Office Action on the merits for the above-captioned application, no filing fee is due. If it is determined that a fee is due, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-1213.

In accordance with the duty of disclosure imposed by 37 C.F.R. §1.56 to inform the Patent Office of all references known by Applicant or Applicant's representative that may be material to the examination of the subject application, Applicant's representative hereby provides this Information Disclosure Statement that is prepared in accordance with 37 C.F.R. §§1.97-1.98. The Forms PTO-1449 (15 pages) and cited reference are provided herewith.

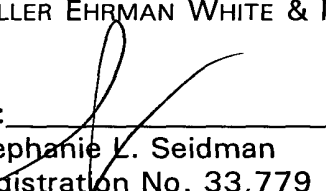
**U.S.S.N. 09/776,191**  
**MADISON, *et al.***  
**Supplemental IDS**

The documents listed on the Forms PTO-1449 and supplied herewith are in the English language. Hence, in accordance with the requirements of 37 C.F.R. §1.98, as amended effective March 16, 1992, no further explanation of the listed items is necessary.

Although these documents are made known to the Patent and Trademark Office in compliance with Applicant's duty of disclosure, such disclosure is not to be construed as an admission by Applicant or Applicant's representative that any of the references, singly or in any combination thereof, is effective as prior art against the subject application. In accordance with 37 C.F.R. §1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 C.F.R. §1.56(b) exists.

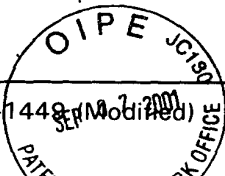
Applicant respectfully requests that the Examiner review the foregoing reference and it be made of record in the file history of the above-captioned application.

Respectfully submitted,  
HELLER EHRMAN WHITE & MCAULIFFE LLP

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EMAIL sseidman@HEWM.com

FORM PTO-1449 (Rev. 12-2000)



LIST OF PATENTS AND PUBLICATIONS FOR  
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SERIAL NO.  
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APPLICANT  
MADISON et al.

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February 2, 2001

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1614

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
	AA	3	5	3	6	8	0	9	10/27/70	Applezweig	424	28	02/17/69
	AB	3	5	9	8	1	2	3	08/10/71	Zaffaroni	128	268	04/01/69
	AC	3	6	3	0	2	0	0	12/28/71	Higuchi	128	260	06/09/69
	AD	3	8	4	3	4	4	3	10/22/74	Fishman	195	63	03/30/73
	AE	3	8	4	5	7	7	0	11/05/74	Theeuwes et al.	128	260	06/05/72
	AF	3	9	1	6	8	9	9	11/04/75	Theeuwes et al.	128	260	02/07/74
	AG	3	9	4	0	4	7	5	02/24/76	Gross	424	1	07/07/71
	AH	4	0	0	6	1	1	7	02/01/77	Merrifield et al.	260	45.9 NP	06/06/75
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	AV	5	3	8	9	4	4	9	02/14/95	Afeyan et al.	428	523	01/05/93
	AW	5	5	9	1	7	6	7	01/07/97	Mohr et al.	514	413	06/06/95

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Title: **NUCLEIC ACID MOLECULES ENCODING TRANSMEMBRANE SERINE PROTEASES, THE ENCODED PROTEINS AND METHODS BASED THEREON**

Mail date: 09/06/01

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ATTY. DOCKET NO.  
24745-1607SERIAL NO.  
09/776,191LIST OF PATENTS AND PUBLICATIONS FOR  
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EXAMINER INITIAL		DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
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	BC	5	7	3	3	5	6	6	03/31/98	Lewis	424	426	10/30/95
	BD	5	9	0	2	7	2	3	05/11/99	Dower et al.	435	6	07/12/96
	BE	5	9	2	5	5	2	5	07/20/99	Fodor et al.	435	6	04/03/98

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER							PUB. DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No	
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	BK	9	3	2	5	2	2	1	23/12/93	PCT				
	BL	9	4	1	7	7	8	4	18/08/94	PCT				
	BM	9	9	4	2	1	2	0	26/08/99	PCT				

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

	BN	Abraham et al., "Immunochemical Identification of the Serine Protease Inhibitor $\alpha_1$ -Antichymotrypsin in the Brain Amyloid Deposits of Alzheimer's Disease", <i>Cell</i> , 52:487-501 (1988)
	BO	Adams et al., "The c-myc oncogene driven by immunoglobulin enhancers induces lymphoid malignancy in transgenic mice", <i>Nature</i> , 318:533-538 (1985)

EXAMINER

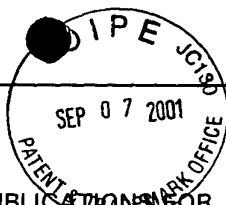
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24745-1607

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APPLICANT  
MADISON et al.

FILING DATE  
February 2, 2001

GROUP  
1614

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BP	Alexander <i>et al.</i> , "Expression of the <i>c-myc</i> Oncogene under Control of an Immunoglobulin Enhancer in <i>Eμ-myc</i> Transgenic Mice", <i>Mol. Cell Biol.</i> , <u>7</u> (4):1436-1444 (1987)
BQ	Auerbach <i>et al.</i> , "Angiogenesis Inhibition: A Review", <i>Pharmacol. Ther.</i> , <u>63</u> (3):265-311 (1994)
BR	Baker <i>et al.</i> , "A Scintillation Proximity Assay for UDP-GalNAc:Polypeptide, <i>N</i> -Acetylgalactosaminyltransferase", <i>Anal. Biochem.</i> , <u>239</u> :20-24 (1996)
BS	Bannwarth <i>et al.</i> , "Global Phosphorylation Of Peptides Containing Oxidation-Sensitive Amino Acids", <i>Bioorganic &amp; Medicinal Chem. Lett.</i> , <u>6</u> (17):2141-2146 (1996)
BT	Bartel <i>et al.</i> , "Isolation of New Ribozymes from a Large Pool of Random Sequences", <i>Science</i> , <u>261</u> :1411-1418 (1993)
BU	Baumbach <i>et al.</i> , "Protein Purification Using Affinity Ligands Deduced from Peptide Libraries", <i>BioPharm.</i> , May ed., 24-35 (1992)
BV	Benton <i>et al.</i> , "Screening $\lambda$ gt Recombinant Clones by Hybridization to Single Plaques in situ", <i>Science</i> , <u>196</u> :180-182 (1977)
BW	Berg <i>et al.</i> , "Long-Chain Polystyrene-Grafted Polyethylene Film Matrix: A New Support for Solid-Phase Peptide Synthesis", <i>J. Am. Chem. Soc.</i> , <u>111</u> :8024-8026 (1989)
BX	Berg <i>et al.</i> , Book: "Peptide Synthesis on Polystyrene-Grafted Polyethylene Sheets", <i>Pept. Proc. 20th Eur. Pept. Symp.</i> , Jung, G. et al., Eds, p.p. 196-198 (1988)
BY	Berg <i>et al.</i> , Book: "Polystyrene-Grafted Polyethylene: Design of Film and Felt Matrices for Solid-Phase Peptide Synthesis", <i>Innovation Perspect. Solid Phase Synth. Collect. Pap.</i> , Int. Symp., 1st Epton, Roger, Ed., p.p. 453-459 (1990)
BZ	Blaney <i>et al.</i> , "Computational approaches for combinatorial library design and molecular diversity analysis", <i>Curr. Opin. Chem. Biol.</i> , <u>1</u> :54-59 (1997)
CA	Bock <i>et al.</i> , "Selection of single-stranded DNA molecules that bind and inhibit human thrombin", <i>Nature</i> , <u>355</u> :564-566 (1992)
CB	Boehm <i>et al.</i> , "The rhombotin family of cysteine-rich LIM-domain oncogenes: Distinct members are involved in T-cell translocations to human chromosomes 11p15 and 11p13", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <u>88</u> :4367-4371 (1991)
CC	Boesen <i>et al.</i> , "Circumvention of chemotherapy-induced myelosuppression by transfer of the <i>mdr1</i> gene", <i>Biotherapy</i> , <u>6</u> :291-302 (1994)

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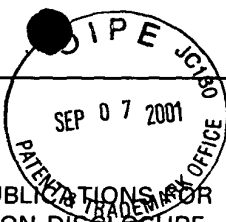
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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CD	Borman, S., "Scientists Refine Understanding Of Protein Folding And Design", <i>Chem. Eng. News</i> , <u>2</u> (12):29-35 (1996)
CE	Boublik <i>et al.</i> , "Eukaryotic Virus Display: Engineering the Major Surface Glycoprotein of the <i>Autographa californica</i> Nuclear Polyhedrosis Virus (AcNPV) for the Presentation of Foreign Proteins on the Virus Surface", <i>Bio/Technol.</i> , <u>13</u> :1079-1084 (1995)
CF	Brenner <i>et al.</i> , "Encoded combinatorial chemistry", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <u>89</u> :5381-5383 (1992)
CG	Bunin <i>et al.</i> , "A General and Expedient Method for the Solid-Phase Synthesis of 1,4-Benzodiazepine Derivatives", <i>J. Am. Chem. Soc.</i> , <u>114</u> :10997-10998 (1992)
CH	Bunin <i>et al.</i> , "The combinatorial synthesis and chemical and biological evaluation of a 1,4-benzodiazepine library", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <u>91</u> :4708-4712 (1994)
CI	<u>Burger's Medicinal Chemistry and Drug Discovery</u> , Book: Volume 1: "Principles and Practice", Wolff, M.E., Ed., John Wiley & Sons, Inc. (1995)
CJ	Butz <i>et al.</i> , "Immunization and Affinity Purification of Antibodies Using Resin-Immobilized Lysine-Branched Synthetic Peptides", <i>Peptide Res.</i> , <u>7</u> (1):20-23 (1994)
CK	Cafilisch <i>et al.</i> , "Computational combinatorial chemistry for de novo ligand design: Review and assessment", <i>Perspectives in Drug Discovery and Design</i> , <u>3</u> :51-84 (1995)
CL	Chen <i>et al.</i> , " "Analogous" Organic Synthesis of Small-Compound Libraries: Validation of Combinatorial Chemistry in Small-Molecule Synthesis", <i>J. Am. Chem. Soc.</i> , <u>116</u> :2661-2662 (1994)
CM	Cheng <i>et al.</i> , "Sequence-Selective Peptide Binding with a Peptido-A,B- <i>trans</i> -steroidal Receptor Selected from an Encoded Combinatorial Receptor Library", <i>J. Am. Chem. Soc.</i> , <u>118</u> :1813-1814 (1996)
CN	Chu <i>et al.</i> , "Using Affinity Capillary Electrophoresis To Identify the Peptide in a Peptide Library that Binds Most Tightly to Vancomycin", <i>J. Org. Chem.</i> , <u>58</u> :648-652 (1993)
CO	Clackson <i>et al.</i> , "Making antibody fragments using phage display libraries", <i>Nature</i> , <u>352</u> :624-628 (1991)
CP	<u>Combinatorial Libraries</u> , Book: "Synthesis, Screening and Application Potential", Cortese, R., Ed., Water de Gruyter, New York (1996)
CQ	Combs <i>et al.</i> , "Protein Structure-Based Combinatorial Chemistry: Discovery of Non-Peptide Binding Elements to Src SH3 Domain", <i>J. Am. Chem. Soc.</i> , <u>118</u> :287-288 (1996)

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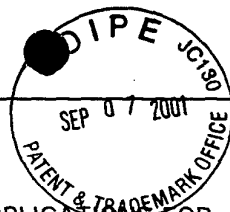
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## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CR	<u>Current Protocols in Molecular Biology</u> , Book: Volume 1, Supplement 47, John Wiley & Sons, Inc. (1990)
CS	Database: Derwent# XP-002169836 WPI Acc. No. 1997-357902/33 (citing Japanese Application No. JP09149790-A, published June 10, 1997)
CT	De Boer <i>et al.</i> , "The <i>tac</i> promoter: A functional hybrid derived from the <i>trp</i> and <i>lac</i> promoters", <i>Proc. Natl. Acad. Sci. USA</i> , <u>80</u> :21-25 (1983)
CU	Desai <i>et al.</i> , "Tumor Angiogenesis and Endothelial Cell Modulatory Factors", <i>J. Immunol.</i> , <u>22</u> (3):186-211 (1999)
CV	Devlin <i>et al.</i> , "Random Peptide Libraries: A Source of Specific Protein "Binding Molecules", <i>Science</i> , <u>249</u> :404-406 (1990)
CW	DeWitt <i>et al.</i> , " "Diversomers:: An approach to nonpeptide, nonoligomeric chemical diversity", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <u>90</u> :6909-6913 (1993)
CX	Dexter <i>et al.</i> , "Conditions Controlling the proliferation of Haemopoietic Stem Cells In Vitro", <i>J. Cell. Physiol.</i> , <u>91</u> :335-344 (1976)
CY	<u>DNA cloning</u> , Book: "A practical approach", Volume I, Glover, D.M., Ed., MRL Press Ltd., Oxford, Washington DC (1985)
CZ	<u>Immobilized Biochemicals And Affinity Chromatography</u> , Book: Dunlap, R.B., Ed., Plenum Press, New York (1974)
DA	Ecker <i>et al.</i> , "Combinatorial Drug Discovery: Which Methods Will Produce the Greatest Value?", <i>Bio/Technol.</i> , <u>13</u> :351-360 (1995)
DB	Eichler <i>et al.</i> , "Identification of Substrate-Analog Trypsin Inhibitors through the Screening of Synthetic Peptide Combinatorial Libraries", <i>Biochem.</i> , <u>32</u> :11035-11041 (1993)
DC	Ellington <i>et al.</i> , " <i>In vitro</i> selection of RNA molecules that bind specific ligands", <i>Nature</i> , <u>346</u> :818-822 (1990)
DD	Erickson <i>et al.</i> , Book: <u>The Proteins</u> , "Solid-Phase Peptide Synthesis", Volume II, Neurath H., Hill, R.L. Eds., Academic Press, New York, p.p. 255-257 (1976)
DE	Felici, F., "Selection of Antibody Ligands from a Large Library of Oligopeptides Expressed on a Multivalent Exposition Vector", <i>J. Mol. Biol.</i> , <u>222</u> :301-310 (1991)
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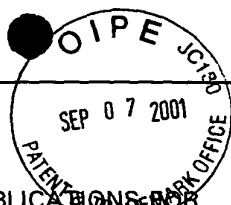
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FJ	Matthews <i>et al.</i> , "Substrate Phage: Selection of Protease Substrates by Monovalent Phage Display", <i>Science</i> , <u>260</u> :1113-1117 (1993)
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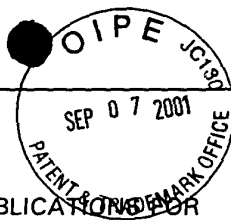
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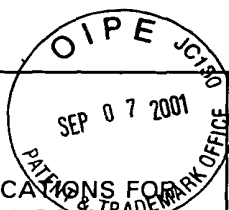
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GY	Senda <i>et al.</i> , "Treatment of Ulcerative Colitis with Camostat Mesilate, A Serine Protease Inhibitor", <i>Intern. Med.</i> , <b>32</b> (4):350-354 (1993)

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FORM PTO-1449 (Modified)

SEP 07 2001

ATTY. DOCKET NO.  
24745-1607SERIAL NO.  
09/776,191LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENTAPPLICANT  
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HB	Simon <i>et al.</i> , "Peptides: A modular approach to drug discovery", <i>Proc. Natl. Acad. Sci. U.S.A.</i> , <u>89</u> :9367-9371 (1992)
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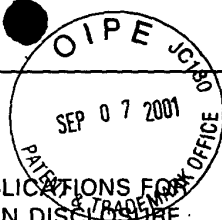
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HN	Tyle, P., "Iontophoretic Devices for Drug Delivery", <i>Pharmaceutical Res.</i> , <u>3(6)</u> :318-326 (1986)
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